

62-29268

Landa, I.
SUSTITUCION PARCIAL DEL COKE POR LIGNITO
EN LA HORNADA DE UN CUBILOTE DE SOPLADO
CALIENTE (Chastichaya Zamena Koksa Buryu Uglem v
Shikhze Vagranki s Podogrevom Duz'ya) (Partial Substi-
tution of Lignite for Coke in the Furnace Charge of Hot
Blown Smelter). Sp. CID: 62-268.
Order from OTS, ETC or CID \$0.80

62-29268

Trans. In Spanish of Liteinoe Proizvodstvo (USSR) 1958,
no. 10, p. 31.

DESCRIPTORS: Fuels, Coke, *Lignite.

(Metallurgy, TT, v. 10, no. 8)

- I. Landa, I.
- II. CID-62-268
- III. Centro de Información
y Documentación,
Madrid (Spain)

Office of Technical Services

DC-2452

The Comparative Economics of Smelting Open-Hearth
and Electric-Furnace Steel in Foundry Production, by
H. S. Sachko, 9 pp.

RUSSIAN, per, ^YLitaknoye Proizvodstvo, No 11,
Moscow, Nov 1958, pp 4-6.

US JPRS/DC-L-1333

USBR
Econ
Jan 59

78,775

Equipment for the Pressure Die Casting of
Steel Under Vacuum, by V. M. Belov, S. A.
Kuzennov.

RUSSIAN, per. Lit Proiz, No 11, 1958,
pp 7-8.

HB 4217

Sci - Engr
Dec 61

175, 017

60-18349

Noskov, B. A., Rozenberg [Yu]. G. and others.
COKE-GAS CUPOLA FURNACE [Koksogazovaya
Vagranka]. [1960] [12]p. (foreign text included).
Order from LC or SLA mi\$2.40, ph\$3.30 60-18349

Trans. of Liteynoye Proizvodstvo (USSR) 1958, no. 11,
p. 14-15.

A cupola is described in which normal conditions for
gas burning and reduced coke expenses were obtained
by reducing the number of tuyeres from 6 to 4.

(Metallurgy--Ferrous Metals, TT, v. 5, no. 3)

1. Cupola furnaces--Design
- I. Noskov, B. A.
- II. Rozenberg, Yu. G.

143,047

Office of Technical Services

Desulfurization of Liquid Cupola Iron by
Magnesium, by B. S. Milman, et al.

RUSSIAN, per, Lit Proiz, Vol IX, No 11, 1958,
pp 15-17.

Brutcher 4518

Sci - Min/Met

Jun 59

90,033

On the Desulfurization of Liquid Iron with
Magnesium, by V. I. Lakowski.

RUSSIAN, per, Lit Frois, Vol I, No 11, 1958,
pp 18.

Henry Bratcher 4519

NI \$2.50

HB 45.20

Sci - Chem

May 59

86,595

Furnace [Specifically, Deoxidizing] Practice for
Steel Casting, by N. N. Dobrokhov.

RUSSIAN, per, Lit Proiz, Vol IX, No 12, 1958,
p 8.

HB 4945

Sci - Chem - Deoxidizing

Mar 61

145,053

Shrinkage Phenomena in Continuous-Cast Steel, by
V. S. Eates, V. A. Leites.

RUSSIAN, per, Lit Froil, Vol IX, No 12, 1958,
pp 10-12.

Henry Bratcher 4554
\$8.60

Sci - Engr

May 59

86,598

A. For a Better Organization in Scientific
Research and Structural Design Work, 4 pp. 102141041

RUSSIAN, per, Lit Proiz, Jan 1959, p 1.

ACSI, E-6054

Sci - Misc

Jan 60

106, 184

B. Factors Determining the Amount of Mould
Taper on Patterns; C. New Technological
Methods in Studying the Fluidity of Metals and
Formation of Shrinkage Cavities; H. E. Cryolite,
An Effective Flux in Brass Smelting, 28 pp.

19

RUSSIAN, per, Lit Frois. Jan 59, pp 27, 48.

ID 2140241

ACSI, H-6054

Sci - Min/Met

C. DSIR LLU RTS 1518

Jan 60

106,177

62-29267

Gorahkov, A. A., Markhasov, B. I. and others.
MEJORA DE LA CALIDAD DE ARENAS DE MOLDEO
POR ADICION DE PEQUEÑAS CANTIDADES DE SALES
(Ushchabeniye Kachestva Formovochnykh Smesel Putem
Vvedeniya Malykh Dobavkov Solei) (Improvement in
Molding Sands Characteristics Through the Addition of
Small Amounts of Salts). 27p. 6 refs. CID:62-267.
Order from OTS, ETC or CID \$1.01 62-29267

Trans. in Spanish of Liternoye Proizvodstvo (USSR)
1959, no. 2, p. 34-38.

DESCRIPTORS: Effectiveness, *Molding materials,
Additives, Salts, *Sand.

(Metallurgy, TT, v. 10, no. 8)

- I. Gorahkov, A. A.
- II. Markhasov, B. I.
- III. CID-62-267
- IV. Centro de Información
y Documentación,
Madrid (Spain)

Office of Technical Services

Grain of Solidifying Metal Refined by Vibration,
by I. I. Novikov.

RUSSIAN, per, Lit Proiz, No 2, 1959, p 42.

Brutcher 4563

Sci - Min/Met

Jun 59

90,043

Manufacture of Castings, 8 pp. USSR

RUSSIAN, per, Lit Proiz Vedstvo, No 3, 1979.

ACSI E-4974
ID 2163944

USSR
Econ
Mar 61.

143,818

Turbovskii, M. M.
MODIFICATION OF CAST IRON BY ADDITIONS OF
MOLTEN STEEL. [1961] 6p.
Order from ATS \$8.40

ATS-07N56R

Trans. of Liteinoe Proizvodstvo (USSR) 1959, no. 3,
p. 4-7.

DESCRIPTORS: *Cast iron, Processing, *Steel, Melt-
ing, Additives.

RJ-3345

(Metallurgy--Ferrous Metals, TT, v. 7, no. 4)

62-12149

- I. Turbovskii, M. M.
- II. ATS-07N56R
- III. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

The Optimum Composition of Alloy Al for Casting
Pistons, by D. P. Lovtsov, 11 pp.

RUSSIAN, per, Lit Prois, No 3, 1959, pp 12-14.

ATTN MEL-247/III

DSIR LLN m-1513 (LOHN)

Sci - Min/Mat

Dec 60

134,625

965 9127

Use of Steel Molds (in Conjunction With Sand
Cores) for Large Steel Castings, by S. I.
Smolenskiy, N. N. Guglin, G. F. Zasetskiy.

RUSSIAN, per, Lit Proiz, No 3, 1959, pp 23-26.

HB 4849

Sci - Min/Met

Feb 61

145, 048

CAUSES OF SATURATION OF METAL-MOLD SURFACES WITH
SULFUR, BY YU. L. LITVAKOVSKAYA, YU. P.
BARDACHEV,

RUSSIAN, PRE , LIT PROIZ, NO 3, 1959,
PP 29, 30.

HB 5680

SCI - MIN/MET
OCT 62

212,099

Heat Resistant Enamel Coating Stable to the
Action of Molten Aluminium, by G. V. Kukolev,
V. N. Tarasenko.

RUSSIAN, per, Lit Proiz, No 3, 1959, pp 45, 46.

DSIR LLU M.1049
(loan)

DSIR LLU M-1945 (LOAN)
SLA 60-13752

Sci - Chem

Oct 60

128,744

Morozov, V. N. and Yaropolov, I. N. CUPOLA FOREHEARTH HEATED BY GASES DI- VERTED FROM TUYERE ZONE. Sep 61. Order from HB \$2. 25 HB-4624 Trans. of Liteinoe Proizvodstvo (USSR) 1959, no. 3, p. 46. DESCRIPTORS: USSR, *Cupola furnaces, Design, Coke, Heat production, Coal gas. (Metallurgy, TT, v. 6, no. 11)	61-25594 I. Morozov, V. N. II. Yaropolov, I. N. III. HB-4624 IV. Brucher, Henry, Altadena, Calif. 666 (1) Office of Technical Services
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Cupola Forehearth Heated by Gases Diverted
From Tuyere Zone, by V. N. Morozov,
I. N. Yaropolov.

RUSSIAN, per, Lit Proiz, 1959, No 3, p 46.

HB 4624

Sci -Engr
Oct 61

Ways of Reducing Labour Consumption in the
Foundry Trade.

RUSSIAN, per, Lit Proiz, May 1959, p 1.

9076743

BISI 1986

USSR

Econ

136,588

Inclusions [Black Spots] in Magnesium-Treated
Cast Iron in a Phosphoric-Chromic Acid Electrolyte,
by L. P. Zaitseva.

RUSSIAN, per, Lit Proiz, No 5, 1959, pp 17, -18.

HB 4651

Sci - Min/Mat

Nov 59

101,236

Hydrodynamic State of Metal and Its Effect on the
Macrostructure of Centrifugal Castings, by N. N.
Reutov.

RUSSIAN, per, Lit Proiz, Jun 1959, pp 22-27.

*HB 4771

Sci - Min/Met
Jan 60

On the Mechanism of Modifying Some Aluminum
Alloys, by L. Kubichek, M. B. Mal'tsev, 9 pp.

RUSSIAN, per, Lit Press, No 5, 1959, pp 28-30.

ATTC MEL-046/III

Sci - Min/Mat

Dec 60

SLA 60-16782
134,616

pp 28-34 — REC NP-tu-535

Metallothermal Method in Producing Zirconium Master Alloy, by A. I. Layner, M. A. Kolenkova, Ye. K. Barent, 12 pp.

RUSSIAN, per, Lit Prois, No 5, 1959, pp 30-32.

ATTC MCL-246/III

Sci - Min/Net

Dec 60

134,617

The Use of Borine Chloride in Casting Magnesium Alloys,
by D. A. Kuznetsov, A. I. Malakhov, 5 pp.

RUSSIAN, per, Lit Proiz, No 5, 1959, pp 32.

ATTC MCL-246/III

Sci - Chem

Dec 60

9659128
134,621

Refining the Structure and Eliminating Cracks
in the Magnesium Alloy, by V. S. Astaulov,
A. D. Klinov, A. S. Astaulova, 7 pp. Castings

RUSSIAN, per, Lit Proiz, No 5, 1959, pp 33-34.

ATIC MCL-246/III

Sci - Min/Met

Dec 66

134,624

Nonuniform Distribution of Elements in
White Cast Iron, by I. E. Lav. UNCL
RUSSIAN, per, Lit Proiz, May 1959, p 36.

HB 4709

Sci - Min/Met
Jan 60

104,559

Transformation of Graphite Inclusions in Cast
Iron Saturated [in Solid State] With Magnesium,
by P. N. Tavadze, M. A. Essen.

RUSSIAN, per, Lit Proiz, Vol X, 1959, No 6,
pp 15-18.

HB 4713

Sci - Min/Met

Apr 60

114,267

Hydrodynamic Condition of Metal in Centrifugal
Casting and Effect on Macrostructure, by N. N.
Routov.

RUSSIAN, per, Lit Proiz, Vol X, No 6, 1959,
pp 22-27.

HB 4771

Sci - Engr

Apr 60

114,268

Press Forming of [Liquid] Steel, by
N. N. Rubtsov, et al.

RUSSIAN, per, Litainoe Proiz, No 7, 1959,
pp 17-18.

IIB 5363

Sci-Min/Met
Jan 63

226,018

Fomichev, A. V. STAMPING OF LIQUID METAL IN A ONE-PIECE DIE. [1961] 7p. (5 figs. omitted) 3 refs. Order from OTS or SLA \$1. 10	61-14975
Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 8, p. 13-14. Another translation is available from LC or SLA mi\$1. 80, ph\$1. 80 as 61-10212 [1960] [6]p.	1. Title: Stamping 2. Title: One-piece die 1. Fomichev, A. V.
DESCRIPTORS: *Liquid metals, Casting, *Dies, *Metal forming presses, Aluminum alloys.	169712
(Machinery--Manufacturing, TT, v. 6, no. 2)	Office of Technical Services

Tatanov, D. P. and Kuranova, N. V. THE PRODUCTION OF COMPLICATED ALUMINUM ALLOY CASTINGS BY PRESSURE DIE CASTING. Jan 60. Order from MT £1 10s MT Trans-99 Trans. of <u>Litinoe Proizvodstvo</u> (USSR) 1959, no. 8, p. 23. DESCRIPTORS: *Transmissions, Vehicles, *Aluminum alloys, *Aluminum castings, Dies, Metal forming presses (Machinery--Manufacturing, TT, v. 6, no. 5)	61-22784 I. Tatanov, D. P. II. Kuranova, N. V. III. MT Trans-99 IV. Tollemache, M. de O. (Gt. Brit.) 180549 Office of Technical Services
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11 221

GE-1

KURTOV I. F.

Production of mild steel with additions of bismuth and boron
Die Herstellung von mit Wismut und Bor modifiziertem
Temperguss

Liteinoe Proizvodstvo, No. 8, 31-34 (1959)
Glesserei-Technik, 6, No. 5, 153-154 (1960)

German

E u r a t o m

Double-Layer Shell Moulding for Iron Castings, by
A. A. Smirnov, I. V. Bobysheva. UNCL

RUSSIAN, per, Lit Proiz, No 9, 1959, pp 14, 15.

*HB 4815

Sci - Engr
May 60

Effect of Lithium on Form of Graphite in Cast Iron,
Tavadze, D. D. Ebanoidze, UNCL

RUSSIAN, per, Lit Proiz, Sep 1959, p 38.

HB 4762

Sci - Min/Met
Jan 60

104,557

Pressure Die Casting of Steel, by V. M. Belov,
S. A. Kazennov.

RUSSIAN, per, Lit Proiz, No 10, 1959, pp 12-17.

HB 4847

Sci - Engr

Oct 60

129,116

^{RE}
THERMAL TREATMENT OF MOLTEN METALS AND ITS
EFFECT ON MECHANICAL PROPERTIES OF CASTING,
BY A. G. SPASSKI, B. A. FOMIN, ~~AND~~
S. I. OLEJNIKOV.

RUSSIAN, PER, LIT PROIZ, NO 10, 1959,
PP 105-108.

ALUMINIUM LAB

SCI - ENGR

173,190

NOV 6L

INTERNATIONAL FOUNDRY CONGRESS (NO. 26) [1961] 5p. [DSIR LLU] M. 2340. Order from LC or SLA m\$1.80, ph\$1.80 61-15476 Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12, p. 1-2. Topics are noted of papers presented at the Congress held in 1958 at Madrid, Spain. (Machinery--Manufacturing, TT, v. 5, no. 12)	61-15476 1. Iron castings 2. Conferences 3. Title: Foundry congress 1. DSIR LLU M. 2340 166623 Office of Technical Services
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61-15477

Kolchinskly, V. M.
CASTING IN CERAMIC MOULDS. [1961] [5]p. [DSIR
LLU] M. 2341.
Order from LC or SLA ml\$1.80, ph\$1.80 61-15477

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 2-3.

Instructions.

- I. Iron castings--Production
- I. Kolchinskly, V. M.
- II. DSIR LLU M. 2341

166624

Office of Technical Services

(Machinery--Manufacturing, TT, v. 5, no. 12)

(Machinery--Manufacturing, TT, v. 5, no. 12)

Kurochkin, P. D.
CASTING BLAST FURNACE IRON. [1961] [4]p. [DSIR
LLU] M. 2342.
Order from LC or SLA ml\$1.80, ph\$1.80 61-15478

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 3-4.

In spite of appreciable differences in silicon content and of a high proportion of phosphorus, the mechanical properties of the iron of blast furnace melts treated with magnesium exceed by a factor of 3 or 4 the mechanical properties of the original iron, also the properties of sulphur and inoculated cupola cast irons (GOST 1412-54) and in many cases approach the mechanical properties of magnesium cupola cast iron (GOST 7293-54). Industrial experience has demonstrated the advantages of magnesium-treated iron from the blast furnace melt for casting machine components.

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15478

I. Iron castings--Production
I. Kurochkin, P. D.
II. DSIR LLU M. 2342

166620

Office of Technical Services

Shestopal, V. M. IN THE FOUNDRIES OF CZECHO-SLOVAKIA. [1961] [9]p. 1 ref. [DSIR LLU] M. 2344. Order from LC or SLA mi\$1.80, ph\$1.80 61-15480 Trans. of <u>Liteynoye Proizvodstvo</u> (USSR) 1959, no. 12, p. 5-7. Processes and special machines introduced in Czecho- slovakia are reviewed. (Machinery--Manufacturing. TT, v. 5, no. 12)	61-15480 1. Iron industry-- Czechoslovakia; 2. Iron castings--Production 1. Shestopal, V. M. II. DSIR LLU M. 2344 106620 Office of Technical Services
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Casting Intricate Iron Components in Multi-
Sectional Chill Moulds, by G. I. Gordon.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 7, 8.

DSIR LRU M.2345
(loan)

Sci - Min/Met

Jun 61

156,889

SLA-61-15481

New Method of Trimming and Fettling Castings,
by M. S. Kashanskiy, et al.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 8, 9.

DSIR LLJ M.2346
(loan)

Sci - Engr

Jun 61

156,890
SNA - 61-15482

Prolov, N. P.
SB BINDER USED FOR LARGE IRON CASTINGS.
[1961] [5]p. [DSIR LLU] M.2347.
Order from LC or SLA ml\$1.80, ph\$1.80 61-15483

Trans. of Liteynoye Proizvodstvo (USSR) 1959, v. 12,
no. 9-10.

The experiences of the heavy casting shop of the
Kolomna Heavy Machine Construction Works are re-
viewed concerning the use of the quick-hardening
SB binder. This binder is an emulsion of sulfited
distillation residues with additions of
GTF (GOST 5339-50) flaky generator tar as emulsi-
fier. Advantages and shortcomings of the binder are
noted.

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15483

I. Iron castings--Binders
1. Prolov, N. P.
II. DSIR LLU M.2347

166629

Office of Technical Services

Below, V. M. THE OPERATION OF DIE-CASTING MACHINES WITH HORIZONTAL PRESSURE CHAMBERS. [1961] [5]p. [DSIR LLU] M2348. Order from LC or SLA mi\$1.80, ph\$1.80 61-15484 Trans. of <u>Liteynoye Proizvodstvo</u> (USSR) 1959, no. 12, p. 11-12. Another translation is available from HB \$2.90 as HB-4879, Sep 60, 1000 words.	61-15484 1. Dies--Casting 2. Steel--Casting 3. Machines--Operation I. Below, V. M. II. DSIR LLU M. 2348.
(Metallurgy, TT, v. 5, no. 11)	160955
	Office of Technical Services

Suction Casting, by A. A. Ridnyy,

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 12, 13

DSIR LIU M.2349
(loan)

Sci - Engr

Jun 61

156,882

Chaykovskiy, K. A.
AN INERTIAL SHAKING-OUT FRAME. [1961] [2]p.
[DSIR LLU] M. 2350.
Order from LC or SLA m\$1.80, ph\$1.80 61-15485

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 13-14.

A 10-ton inertial shaking-out frame is described that
was designed and constructed at the Sibyazhmash
Works.

(Machinery--Machine Parts, TT, v. 5, no. 12)

61-15485

I. Inertia devices--Design
1. Chaykovskiy, K. A.
II. DSIR LLU M. 2350

1066.0

Office of Technical Services

(Machinery--Machine parts, 11, v. 5, no. 12)

Kushch, K. M.
APPARATUS WITH ONE ELECTRONIC VALVE
CARRYING OUT THE FUNCTIONS OF MANY
TIME - AND FEED-BACK RELAYS. [1961] [6]p.
3 refs. [DSIR LLU] M. 2351.
Order from LC or SLA m/\$1.80, ph/\$1.80 61-15486

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 14-15.

An electronic mechanism for time control is described
which replaces any number of successively arranged
time relays with adjustable or independent timing.

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15486

1. Control systems--Design
 2. Foundries--Operation
 3. Industrial production--
Control systems
- I. Kushch, K. M.
 - II. DSIR LLU M. 2351

166631

Office of Technical Services

(Machinery--Manufacturing, TT, v. 5, no. 12)

Zorin, A. L.
MECHANIZATION OF SINGLE AND SMALL SCALE
PRODUCTION OF CORES. [1961] [5]p. [DSIR LLU]
M. 2352.
Order from LC or SLA m\$1.80, ph\$1.80 61-15487

Trans. of Liternoye Proizvodstvo (USSR) 1959, no. 12,
p. 15-16.

A machine for densifying by vibration is described.

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15487

1. Castings--Production
2. Castings--Machining
- I. Zorin, A. L.
- II. DSIR LLU M. 2352.

168632

Office of Technical Services

(Machinery--Manufacturing, TT, v. 5, no. 12)

The Mechanism of ~~Exp~~ Graphite Formation in
Magnesium Iron, by R. P. Rusev.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 17-19.

NLL M. 2353

Sci - Min/Metals

174, 991

Dec 61

Effect of Inoculation Agents on the Shrinkage of
High Alloy Chromium and Chromium-Nickel Steels,
by N. S. Kreshchanovskiy, M. P. Demin.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 19-21.

NLL M. 2354

Sci - Min/Metals

174.990

Dec 61

Hot Shortness of Aluminium Alloys Due to
Overheating the Melt, by I. I. Novikov, G. A.
Korolkov.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 21-22.

NLL M. 2355

Sci - Min/Metals

173, 975

Nov 61

The Overheating of Iron in the Cupola, by A. V.
Kaibichev, V. P. Chernobtovkin.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 22-24.

DSIR M.2356

Sci - Chem

Sep 61

168,604
SLA-61-15488

Levi, L. I. and Zhukov, A. A. NITROGEN IN HIGH MANGANESE STEELS. (1961) [12]p. 25 refs. DSIR [LLU] M. 2357. Order from LC or SLA ml\$2.40, ph\$3.30 61-15489 Trans. of <u>Litovskoye Proizvodstvo</u> (USSR) 1959, no. 12, p. 24-27. (Metallurgy--Ferrous Metals, TT, v. 3, no. 11)	61-15489 1. Steel castings-- Microstructure 2. Nitrogen--Metallurgical effects I. Levi, L. I. II. Zhukov, A. A. III. DSIR LLU M. 2357 160956 Office of Technical Services
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Popov, A. D. CRYSTALLIZATION OF IRON IN CONTINUOUS CASTING. [1961] [4]p. [DSIR LLU] M. 2358. Order from OTS or SLA \$1. 10 61-15490 Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12, p. 27-28. DESCRIPTORS: *Cast iron, *Crystallization, *Pipes, Casting, Iron. The principal factors in determining efficient techno- logical parameters for the continuous casting of iron tubes and other components are (1) the crystallization constants in continuous casting of iron (2) the thick- ness of the solidifying shell in the mould, and (3) the depth of the liquid phase. (Metallurgy, TT. v. 6, no. 1)	61-15490 I. Popov, A. D. II. DSIR LLU M. 2358 161789 Office of Technical Services
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61-15491

Gol'dshcheyn, Ya. Ye. and Pyatakova, L. L.
THE EFFECT OF TITANIUM ON THE PROPERTIES
OF BORON-CONTAINING STEELS. [1961] [10]p.
1 ref. [DSIR LLU] M. 2359.
Order from OTS or SLA \$1.10

61-15491

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 28-31.

DESCRIPTORS: Casting. *Steel. *Titanium. *Boron steel.

L36R, 45R, and 20 KhGNR boron steels were examined. It was concluded that titanium added to boron containing steel exerts a strong inhibiting action on grain growth. A combined decarboxidation of boron steel with silico-calcium (0.2-0.3%) and small additions of aluminum (0.03%) is very effective. The advisability of titanium additions depends upon the intended use of the steel and upon the conditions of its subsequent hot mechanical and thermal treatments. The addition of titanium is undesirable for casting-type steels. (Metallurgy, TT, v. 6, no. 1)

I. Gol'dshcheyn, Ya. Ye.
II. Pyatakova, L. L.
III. DSIR LLU M. 2359

161790

Office of Technical Services

The Effect of Densification of the Strength of the
Moulding Mixture With S.B. Binder, by N. D.
Igorkina.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 31-32.

DSIR M.2360

Sci - Engr

Sep 61

168,600
SLA-61-15492

Vallsovskiy, I. V.
WETTING OF MOULDING MATERIALS BY THE
MOLTEN ALLOY. [1961] [12]p. 12 refs. [DSIR
LLU] M. 2361.
Order from OTS or SLA \$1. 60

61-15493

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 32-35.

DESCRIPTORS: *Casting, *Flotation, Wetting agents,
*Molding materials, Liquid metals, *Alloys.

A comparison of the wetting of moulding materials by
different alloys showed that in an oxidizing gaseous
medium the wetting by Armco iron and by 30L carbon
steel is practically the same. In a neutral gas atmos-
phere the acid moulding materials (mixtures on a
quartz base and chromium iron ores) are wetted better
by 30L steel and worse by chromium nickel steel.
Armco iron occupies an intermediate position. The
basic moulding materials (magnesite and chrome-
(Metallurgy, TT, v. 6, no. 1) (over)

61-15493

I. Vallsovskiy, I. V.
II. DSIR LLU M. 2361

161791

Office of Technical Services

Effect of Small Additions of Zirconium, Titanium
and Boron on the Structure and Properties of Silicon
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RUSSIAN, per, Lit Proiz, No 12, 1959, pp 35-37.

DSIR LLU M.2362
(loan)

Sci - Min/Met

Jun 61

156, P 87
SLA-61-15494

Automatic Discard Control of the Spent Mixture From
the Shaking Out Frames on to a Belt Conveyor, by
P. D. Adayev, et al.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 37.

DSIR M.2363

Sci - Engr

168,588

Sep 61

Production of Iron Castings of High Quality, by
I. P. Khedosek.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 38.

DSIR M.2363

Sci - Engr

Sep 61

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Shell Cores With Water-Glass Mixtures, by V. S.
Burov.

RUSSIAN, per, Lit Froiz, No 12, 1959, p 38.

NLL M. 2363

Sci - Chem

Jan 62

180, 050

Coating Cast Iron Crucibles for Melting
Aluminium Alloys, by M. P. Kuptsov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 39.

NLL M. 2363

Sci - Engr

174,984

Dec 61

Experience With a Moulding Compound on a Lignite Base,
by O. P. Pavlov, et al.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 39.

DSIR M.2363

Sci

Sep 61

A Sectional Casting Box, by B. V. Rabinovich.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 39.

DSIR M.2363

Sci

Sep 61

Melting Magnesium Alloy in Basic Crucibles, by
A. P. Perov, I. S. Pryanishnikov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 40.

DSIR M.2363

Sci

Sep 61

Experience With Induction Furnaces, by V. V. Panin.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 40.

DSIR M.2363

Sci

Sep 61

One Piece Coreboxes for Making Tall Cylindrical
Cores, by P. K. Khamidov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 41.

NLL M. 2363

Sci - Engr

Dec 61

174,982

The Problem of Automatic Mould Filling, by
A. M. Shmyakov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 41.

NLL M. 2363

Sci - Engr

Dec 61

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Extraction of Metallic Inclusions From Spent
Moulding Mixtures, by V. A. Shcherbina.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 42.

NLL M. 2363

Sci - Engr

Dec 61

174.985

First Russian Manual for Foundry Practice & Its
Author:- Mining Engineer Apollon Fedorovich Nevius, by
D. M. Modolevich.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 43-45.

DSIR N. 2364

USSR

Econ

Sep 61

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Proizvodstvo.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 45.

NLL M. 2365

Jan 62

Cast Iron for the Manufacture of Alkali-Resisting
Boilers, by K. I. Vashchenko, A. M. Firstov, P. V.
Avrinskiy.

RUSSIAN, per, Lit Proiz, No 1, 1960, pp 7-10.

BCIRA 1005

Sci - Engr

Sep 61

168, 587

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FORMEN, ZUSAMMENSETZEN UND AUSSCHLAGEN
VON GUSSTUECKEN (Automatic Line for Molding,
Assembling and Shakeout of Castings). 8p.
Order from TIB \$1.55

Trans. in German of Litinoe Proizvodstvo (USSR)
1960, no. 1, p. 16-19.

DESCRIPTORS: *Automation, *Molding, *Castings.

(Machinery--Manufacturing, TT, v. 9, no. 11)

62-27344

- I. Bolshakov, I. P.
- II. Svyatkin, B. K.
- III. Technische Informations-
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(West Germany)

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Segregation in Centrifugal Steel Castings, by
N. N. Reutov.

RUSSIAN, per, Lit Proiz, No 1, 1960, pp 35, 36.

HB 5044

Sci - Min/Met

Jun 61

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Gorshkov, A. A.
GIESSEREIINSTITUT DER UKRAINISCHEN AKADEMIE
DER WISSENSCHAFTEN (Foundry Production Institute
of the Ukrainian Academy of Sciences). 11p.
Order from TIB \$2.00

Trans. in German of Liteinoe Proizvodstvo (USSR) 1960,
no. 1, p. 46-48.

DESCRIPTORS: *Casting, Production

(Machinery--Manufacturing, TT, v. 9, no.11)

62-27346

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Experimental Inoculation of Cast Iron With Cerium
Alloys, by E. M. Shkol'nikov, et al.

RUSSIAN, per, Lit Proiz, No 2, 1960, pp 36, 37.

HB 4873

1 - Min/Met

pp 60

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Influence of Composition and Heat Treatment of
Metal Alloys on the Feeding of Castings, by K. N.
Militsyn,

RUSSIAN, per, Liteinoe Proizvodstvo, No 3, 1960,
pp 19-24.

GB/1

Sci

Dec 62

Operation of an Unlined [Boundary] Goggles, by
P. N. Zelentsov.

RUSSIAN, per, Lit Proiz, No 3, 1960, p 27.

HB 4818

Sci - Engr
16 Nov 60

131, 885-

Use of Exothermic Sleeves for Heating of Feeder
Heads on a Steel Armature Casting, by L. O.
Sokolovskiy.

RUSSIAN, per, Lit Proiz, No 3, 1960, p 32.

BCIRA 1012

Sci - Chem

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May 62

CASTING IN ANODISED MOULDS, BY G. L.
PETROV.

RUSSIAN, PER, LIT PROIZ, NO 4, 1960, P 46.

ALUMINIUM LAB

SCI - ENGR

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NOV 6
L

Dimensional Accuracy and Surface Finish of
Castings, by I. I. Goryunov.

RUSSIAN, per, Liv Proiz, No 5, 1960, pp 1-4.

Aluminum Lab

Sci - Engr

Oct 60

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S. G. Iron for Mining Machine Components, by
L. P. Gorushkina, et al.

RUSSIAN, per, Lit Proiz, No 5, 1960, pp 42, 43.

BISI 2150

Sci - Min/Met

Jun 61

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Effect of Calcium Upon Graphic Structure in Cast
Iron, by F. N. Tavazde, Sh. S.
Katsitadze.

RUSSIAN, per, Lit Proiz, No 6, 1960, pp 29, 30.

HB 4884

Sci - Chem, Min/Met

Sep 60

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CONVEYORIZED FURNACE FOR ANNEALING OF PIPE,
BY A. V. SKVORTSOV.

RUSSIAN, PER, LIT PROIZ, NO 6, 1960,
PP 42-43.

HB 5187

SCI - ENGR
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Another Note on the Deoxidation of Steel With
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RUSSIAN, per, Lit Proiz, No 6, 1960,
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HB 5024

Sci - Chem

Jan 61

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(NY-2900/25)

Mechanized Continuous Line of Sandblast Machine
Molding, by A. S. Shuper, L. Ya. Melekhin, 8 pp.

RUSSIAN, per, Liteynoye Proizvodstvo, No 7, 1960,
pp 14-16.

JPRS 7252

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REPLYING OF SPANISH-AMERICAN...
Dr. Hernandez, L. P. Gonzalez.

RUSSIAN, per, Lit Proiz, No 7, 1960, pp 24-26.

HB 4907

Sci - Min/Met
16 Nov 60

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Girshovich, N. G.
THE EFFECT OF SUPERHEATING DURING MELT-
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Order from ATS \$19.45

ATS-09N56R

Trans. of Liteinoe Proizvodstvo (USSR) 1960, no. 7,
p. 26-32.

DESCRIPTORS: *Cast iron, Heat treatment, Melting.

RJ-3343

(Metallurgy--Ferrous Metals, TT, v. 7, no. 4)

62-12155

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II. ATS-09N56R
III. Associated Technical
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Office of Technical Services

Casting of Metals With the Pouring System [Instead
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RUSSIAN, per, Lit Proiz, No 7, 1960, pp 34-36.

HB 4908

Sci - Engr

Oct 60

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Operating Experiences With [Natural] Gas-Fired
Cupolas, by P. L. Shkurupiy, A. G. Arnopolin.

RUSSIAN, per, Lit Prois, No 9, 1960, pp 12, 13.

HB 5098

Sci - Engr

Apr 61

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WATER-COOLED MELTING ZONE, PRODUCING
20 TONS OF METAL PER HOUR. Sep 61, 1000
words.
Order from HB \$3.90

HB-5202

Trans. of Liteinoe Proizvodstvo (USSR) 1960, no. 9,
p. 13-16.

DESCRIPTORS: USSR, *Cupola furnaces, Design,
Natural gas, Coke, Gases, Fuel oils, Heating, Indus-
trial production, Iron industry, Water, Cooling,
Melting, Control, Automation.

(Metallurgy, TT, v. 6, no. 11)

61-25595

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Calif.

168705

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Computer Calculation of Temperature Distribution
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RUSSIAN, per, Lit Proiz, Sep 1960, pp 25-28.

HB 5125

Sci - Engr

Jun 61

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RADIOACTIVE ISOTOPE STUDY OF CRYSTALLIZATION OF
ALUMINUM DURING CONTINUOUS CASTING, BY V. I.
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6 Feb 61

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Order from STT \$15.00 STT-146-205

Trans. from Litsinoe Proizvodstvo (USSR) 1960,
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DESCRIPTORS: *Foundries, *Cores, Transportation,
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